

IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of the claims in this application.

The text of all pending claims, (including withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

Please AMEND claims 1-16 and ADD new claims 17-20 in accordance with the following:

1. (Currently amended) An organic electroluminescent device comprising:
a substrate;
a first electrode to define a pixel region formed on the substrate;
multiple organic film layers to perform light emission formed on the first electrode; and
a second electrode formed on the multiple organic film layers;
wherein the multiple organic film layers comprise:
an emitting layer; and
~~at least one of a hole injection layer and a hole transport layer; and wherein the at least one of the hole injection layer and the hole transport layer comprises comprising an electron acceptor material.~~

2. (Currently amended) The organic electroluminescent device according to claim 1,
wherein the electron acceptor material is selected from the group consisting of:
an aromatic compound having ~~one of~~ a nitro group ~~and or~~ a cyano group;
an olefin compound having ~~one of~~ a nitro group ~~and or~~ a cyano group;
a perylene compound having ~~one of~~ a nitro group ~~and or~~ a cyano group;
a heterocyclic compound having ~~one of~~ a nitro group ~~and or~~ a cyano group;
2,4,7-trinitrofluorenone;
2,4-dinitroaniline;
5-nitroanthranilonitrile
2,4-dinitrodiphenylamine

1,5-dinitronaphthalene; and
3,5-dinitrobenzonitrile.

3. (Currently amended) The organic electroluminescent device according to claim 1, wherein the electron acceptor material constitutes 0.01 to 10 wt.% of a total weight of ~~the at least one of the hole injection layer and the hole transport layer~~.

4. (Currently amended) The organic electroluminescent device according to claim 1, wherein the multiple organic film layers further comprise ~~at least one of~~ layer selected from a hole-blocking layer, an electron injection layer, and an electron transport layer.

5. (Currently amended) The organic electroluminescent device according to claim 1, wherein a thickness of ~~the at least one of the hole injection layer and the hole transport layer~~ is 1 to 4,000 Å.

6. (Currently amended) The organic electroluminescent device according to claim 4, wherein the ~~at least one of~~ layer selected from the hole-blocking layer, the electron injection layer, and the electron transport layer comprises an electron donor material.

7. (Currently amended) The organic electroluminescent device according to claim 6, wherein the electron donor material is selected from the group consisting of:

an aromatic compound having ~~one of~~ hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

an olefin compound having ~~one of~~ hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

an allene compound having ~~one of~~ hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

a thiophene compound having ~~one of~~ hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

a fulvalene heterocyclic compound having ~~one of~~ hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

poly(3,4-ethylene-dioxythiophene);

tetraphenylethylene;
azulene;
1,2,3,4-tetraphenyl-1,3-cyclophenetadiene; and
bis(ethylenedithio)tetrathiafulvalene.

8. (Currently amended) The organic electroluminescent device according to claim 6, wherein the electron donor material constitutes 0.01 to 50 wt.% of a total weight of the at least one of layer selected from the hole-blocking layer, the electron injection layer, and the electron transport layer.

9. (Currently amended) The organic electroluminescent device according to claim 6, wherein the at least one of layer selected from the hole-blocking layer, the electron injection layer, and the electron transport layer are formed by ~~one~~ of spin-coating, front deposition, and/or co-deposition.

10. (Currently amended) The organic electroluminescent device according to claim 6, wherein a thickness of the at least one of layer selected from the hole-blocking layer, the electron injection layer, and the electron transport layer is 1 to 4,000 Å.

11. (Currently amended) An organic electroluminescent device comprising:
a substrate;
a first electrode to define a pixel region formed on the substrate;
multiple organic film layers to perform light emission formed on the first electrode; and
a second electrode formed on the multiple organic film layers;
wherein the multiple organic film layers comprise:
an emitting layer; and
~~at least one of layer selected from a hole-blocking layer, and an electron injection layer, and an electron transport layer; and~~
wherein the at least one of layer selected from the hole-blocking layer, and the electron injection layer, and the electron transport layer comprise comprises an electron donor material.

12. (Currently amended) The organic electroluminescent device according to claim 11, wherein the electron donor material is selected from the group consisting of:

an aromatic compound having one of hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

an olefin compound having one of hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

an allene compound having one of hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

a thiophene compound having one of hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

a fulvalene heterocyclic compound having one of hydrogen, an alkyl group, a phenyl group, an NR₂ group, an OR group, and/or an SiR₃ group;

poly(3,4-ethylene-dioxythiophene);

tetraphenylethylene;

azulene;

1,2,3,4-tetraphenyl-1,3-cyclophentadiene; and

bis(ethylenedithio)tetrathiafulvalene.

13. (Currently amended) The organic electroluminescent device according to claim 11, wherein the electron donor material constitutes 0.01 to 50 wt.% of a total weight of the at least one of layer selected from the hole-blocking layer, and the electron injection layer, and the electron transport layer.

14. (Currently amended) The organic electroluminescent device according to claim 11, wherein the multiple organic film layers further comprise at least one of layer selected from a hole injection layer and a hole transport layer.

15. (Currently amended) The organic electroluminescent device according to claim 11, wherein the at least one of layer selected from the hole-blocking layer, and the electron injection layer, and the electron transport layer are is formed by one of spin-coating, front deposition, and or co-deposition.

16. (Currently amended) The organic electroluminescent device according to claim 11, wherein a thickness of the at least one of layer selected from the hole-blocking layer, and the electron injection, layer and the electron transport layer is 1 to 4,000 Å.

17. (New) The organic electroluminescent device according to claim 1, wherein the multiple organic film layers further comprise a hole transport layer; and
wherein the hole transport layer comprises an electron acceptor material.

18. (New) The organic electroluminescent device according to claim 11, wherein the multiple organic film layers further comprise an electron transport layer; and
wherein the electron transport layer comprises an electron donor material.

19. (New) The organic electroluminescent device according to claim 14, wherein the at least one layer selected from the hole injection layer and the hole transport layer comprises an electron acceptor material.

20. (New) The organic electroluminescent device according to claim 19, wherein the electron acceptor material is selected from the group consisting of:
an aromatic compound having a nitro group or a cyano group;
an olefin compound having a nitro group or a cyano group;
a perylene compound having a nitro group or a cyano group;
a heterocyclic compound having a nitro group or a cyano group;
2,4,7-trinitrofluorenone;
2,4-dinitroaniline;
5-nitroanthranilonitrile
2,4-dinitrodiphenylamine
1,5-dinitronaphthalene; and
3,5-dinitrobenzonitrile.